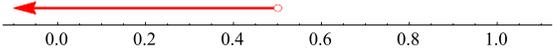


7.EE.4: Worksheet

Solutions

- At the zoo, there are 3 fewer ferrets than twice the number of tigers. If there are 21 ferrets, what's an equation for the number of tigers at the zoo? **Our equation is $2t - 3 = 21$.**
- Jenna bought enough lattes for all her friends. Each latte was \$3.50 and she gave the barista a \$20 bill, who then gave her back \$2.50 in change. Write an equation modeling this, with x as the cost per latte. How many lattes did she buy? **Our equation is $20 - 3.5x = 2.5$, which means $x = 5$ lattes.**
- The perimeter of a square is 15 feet. What's an equation for finding the length of one of its sides (s)? How long is each side? **The equation is $4s = 15$, so $s = 3.75$ ft.**
- Yvette can spend no more than \$100 at her local armory this week. She spends \$35 on potions and wants to spend the rest on swords. If each sword costs \$5, write an inequality for the number of swords she can buy. **Her inequality is $5s + 35 \leq 100$, or $s \leq 13$.**
- Barbara made \$310.05 this week, and she's ready to spend it all. She buys 45 kittens and still has \$3.60 left over. How much was each kitten? What equation did you use to solve this? **Using the equation $45k + 3.6 = 310.05$, each kitten cost \$6.81.**
- Solve $50x - 18 < 7$ and graph the solution on a number line. **The solution is $x < 0.5$.**

- If John buys 8 jackets at x dollars apiece and 2 movie tickets at \$11 apiece, what's the most he can spend on each jacket if his total budget is \$200? **He can spend no more than \$22.25 per jacket.**
- Laura sells used cars, and she really needs to make at least \$1055 at her job this month to cover her bills. If she gets a monthly salary of \$600, plus \$45.50 for each car she sells, what's an inequality that shows this? Will she be okay if she sells 8 cars? **The inequality is $45.5c + 600 \geq 1055$, which comes out to $c \geq 10$. That means she needs to sell at least 10 cars, so 8 won't quite get her enough money.**
- The sum of three consecutive odd numbers is 21. What's an equation representing this? **Odd numbers increase by 2 every time, so our equation is $x + (x + 2) + (x + 4) = 21$, or $3x + 6 = 21$, where x is the first number.**
- Using the information from the previous problem, what are the three numbers? **The numbers are 5, 7, and 9.**